

09/554547

(FILE 'CAPLUS' ENTERED AT 10:56:33 ON 17 JAN 2002)

L1 127 SEA FILE=CAPLUS ABB=ON PLU=ON CEMENT(3A) (PROTEIN OR
POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE)
L2 1 SEA FILE=CAPLUS ABB=ON PLU=ON L1(S)TISSUE

L1 127 SEA FILE=CAPLUS ABB=ON PLU=ON CEMENT(3A) (PROTEIN OR
POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE)
L3 2 SEA FILE=CAPLUS ABB=ON PLU=ON L1 AND (APPENDICULAT? OR
TICK OR ECTOPARASIT? OR PARASIT?)

-key terms

=> s 12 or 13

L4 2 L2 OR L3

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:798068 CAPLUS

DOCUMENT NUMBER: 135:356741

TITLE: Vaccine comprising a **tick**
cement proteinINVENTOR(S): Trimmell, Adama Roseanne; Paesen, Guido
Christiaan; Nuttall, Patricia Anne

PATENT ASSIGNEE(S): Evolutec Limited, UK

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001080881	A1	20011101	WO 2001-GB1834	20010425
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: GB 2000-10068 A 20000425

GB 2000-28606 A 20001123

AB . The invention relates to the use of **tick cement proteins** in the prodn. of vaccines for protecting animals against the bite of blood-sucking **ectoparasites** and against the transmission of viruses, bacteria and other pathogens by such **ectoparasites**. When used as vaccine components, the **tick cement proteins** of the invention confer broad cross-reactivity against a variety of species of **ectoparasite**.

REFERENCE COUNT: 6

REFERENCE(S): (1) Brown, S; EXP PARASITOL 1986, V62, P40
CAPLUS(3) Mulenga, A; INF IMMUN 1999, V67(4), P1652
CAPLUS

- (4) National Environmental Research Council; WO 9924567 A 1999 CAPLUS
 (5) Shapiro, S; EXP APPL ACAROL 1989, V7, P33 CAPLUS
 (6) Yale University; WO 0140469 A 2001 CAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:326042 CAPLUS

DOCUMENT NUMBER: 130:348205

TITLE: **Tick tissue cement**

proteins and cDNAs and their uses as vaccines and in bonding **tissues**

INVENTOR(S): Paesen, Guido Christian; Nuttall, Patricia Ann

PATENT ASSIGNEE(S): National Environmental Research Council, UK

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9924567	A1	19990520	WO 1998-GB3397	19981112
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9910471	A1	19990531	AU 1999-10471	19981112
EP 1029044	A1	20000823	EP 1998-952929	19981112
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
BR 9814958	A	20001003	BR 1998-14958	19981112
PRIORITY APPLN. INFO.:			GB 1997-23945	A 19971112
			WO 1998-GB3397	W 19981112

AB The present invention relates to **tissue cement proteins** produced by certain species of blood-feeding **ectoparasites**, such as the **tick** *Rhipicephalus appendiculatus*. These proteins and compns. comprising these proteins are particularly useful for the temporary or permanent bonding of animal tissues to each other or to other biomaterials. The present invention also relates to the use of **tissue cement proteins** in the prodn. of vaccines that protect animals against the bite of blood-sucking **ectoparasites** and the transmission of viruses, bacteria and other pathogens by such **ectoparasites**. Thus, antisera against buffer-extd. and hot alkali and acid-extd. **cement cone proteins** were prepd. and used in screening cDNA libraries from *R. appendiculatus* salivary gland. Several "**cement proteins**" were identified. One was expressed in a baculovirus-insect cell system. This 144-amino acid protein is proposed to act as a glue which binds the cement cone to

the surrounding epidermal and dermal tissues of the host.

REFERENCE COUNT: 9

REFERENCE(S): (1) Brown, S; Experimental Parasitology 1986, V62(1), P40 CAPLUS
(2) Crampton, A; Exp Appl Acarol 1998, V22(3), P177 CAPLUS
(3) Int Centre of Insect Physiolog; GB 2142334 A 1985 CAPLUS
(6) Needham, G; Experimental & Applied Acarology 1989, V7, P21 CAPLUS
(7) Shapiro, S; Experimental & Applied Acarology 1989, V7, P33 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 11:04:57 ON 17 JAN 2002)

L5 6 S L2

L6 14 S L3

L7 19 S L5 OR L6

L8 9 DUP REM L7 (10 DUPLICATES REMOVED)

L8 ANSWER 1 OF 9 BIOSIS COPYRIGHT 2002 BIOSIS

ACCESSION NUMBER: 2002:42189 BIOSIS

DOCUMENT NUMBER: PREV200200042189

TITLE: Conformation of a model peptide of the tandem repeat decapeptide in mussel adhesive protein by NMR and MD simulations.

AUTHOR(S): Kanyalkar, Meena; Srivastava, Sudha (1); Coutinho, Evans

CORPORATE SOURCE: (1) Tata Institute of Fundamental Research, National Facility for High Field NMR, Homi Bhabha Road, Colaba, Navy Nagar, Mumbai, 400 005: sudha@tifr.res.in India

SOURCE: Biomaterials, (January, 2002) Vol. 23, No. 2, pp. 389-396. print.
ISSN: 0142-9612.

DOCUMENT TYPE: Article

LANGUAGE: English

AB The conformation of a model peptide (Ala-Lys-Pro-Ser-Tyr-Hyp-Hyp-Thr-Tyr-Lys) of the tandem repeat decapeptide sequence of Mytilus edulis foot protein-1 (mefp-1) has been studied by ¹H and ¹³C 2D-NMR in three diverse media-DMSO-d₆, water (pH 3.5) and 40% hexafluoroacetone (HFA). Various NMR parameters that were used to deduce the secondary structure were chemical shift (¹H and ¹³C), temperature coefficients of NH chemical shifts, ³JN^Hα coupling constants and the pattern of intra and inter-residue NOEs. Molecular dynamics simulations making integral use of the NMR data shows that the conformation of the peptide is conserved in all the three media. The structure in the three solvents is best defined as a left-handed polyproline II helix (PPII).

L8 ANSWER 2 OF 9 MEDLINE DUPLICATE 1

ACCESSION NUMBER: 2001263339 MEDLINE

DOCUMENT NUMBER: 21254320 PubMed ID: 11355679

TITLE: The cement apparatus of larval and adult Acanthocephalus anguillae (Acanthocephala), with notes on the copulatory cap and origin of gland secretion.

09/554547

AUTHOR: Dezfuli B S; Simoni E; Mischiati C
CORPORATE SOURCE: Department of Biology, University of Ferrara, Italy..
dzbb@dns.unife.it
SOURCE: PARASITOLOGY RESEARCH, (2001 Apr) 87 (4) 299-305.
Journal code: PRE; 8703571. ISSN: 0932-0113.
PUB. COUNTRY: Germany; Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200111
ENTRY DATE: Entered STN: 20011105
Last Updated on STN: 20011105
Entered Medline: 20011101

AB Light and electron microscopy were used to investigate the ultrastructure of the cement apparatus, namely cement glands and cement ducts, of mature specimens of the **parasite** *Acanthocephalus anguillae* (Muller, 1780) Luhe, 1911 recovered from the alimentary canal of fish *Leuciscus cephalus* (Risso, 1826). In addition, the cement apparatus of immature *A. anguillae* found within the body cavity of the crustacean *Asellus aquaticus* (L.) was examined. In immature and mature males of *Acanthocephalus anguillae*, there are six round cement glands and each of them has an outer cytoplasmic layer containing nuclei and surrounds a space for storage of the cement. The cytoplasmic layer produces round, membrane-bound secretory granules approximately 1 microm in diameter. Nuclei and other cellular organelles surrounded by secretory granules were noticed inside the luminal part of the gland of adult males. In some female *Acanthocephalus anguillae*, within the attached copulatory cap, eggs and spermatozoa were observed. A protein of about 23 kDa appeared to be the major component of **proteins** of isolated **cement** glands, as well as in detached copulatory caps.

L8 ANSWER 3 OF 9 MEDLINE
ACCESSION NUMBER: 2000470514 MEDLINE
DOCUMENT NUMBER: 20376671 PubMed ID: 10921252
TITLE: [The state of the dental hard tissues in persons under the influence of ionizing radiation (based on the data from infrared spectroscopy)].
Stan tverdykh tkanyu zubiv u osib, iaki zaznaly vplyvu ionizuiuchoho vyprominiuvannia (za danyymi infrachervonoi spektroskopii).
AUTHOR: Bebesheko V H; Darchuk L O; Zaverbna L V
SOURCE: LIKARSKA SPRAVA, (2000 Apr-Jun) (3-4) 21-5.
Journal code: CIU; 9601540. ISSN: 1019-5297.
PUB. COUNTRY: Ukraine
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Ukrainian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200010
ENTRY DATE: Entered STN: 20001012
Last Updated on STN: 20001012
Entered Medline: 20001005

AB A total of 27 teeth were examined in those subjects having been exposed to ionizing radiation in doses between 0.5 and 2.0 Gy, together with ten teeth of essentially healthy individuals. The enamel, dentine and **cement** mineral and **protein** contents were studied versus control with the aid of infrared

09/554547

spectroscopy techniques. It has been ascertained that in the teeth of patients presenting with dose loads there take place changes in the organic matrix. Amide I: amide II ratio tends to diminish toward contribution of Amide I. The mineral composition of the enamel reveals practically no changes under exposure to radiation. The dentine and cement display clear-cut changes in the mineral component. There appear absorption bands that belong to more soluble forms of calcium phosphate, which fact suggests an active destructive process in underlying hard **tissues** of the teeth, that gets intensified under exposure to ionizing radiation.

L8 ANSWER 4 OF 9 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
 ACCESSION NUMBER: 1999-327399 [27] WPIDS
 DOC. NO. NON-CPI: N1999-245540
 DOC. NO. CPI: C1999-096981
 TITLE: **Tissue cement proteins**
 produced by blood-feeding **ectoparasites**
 and related polynucleotides.
 DERWENT CLASS: B04 D16 P14
 INVENTOR(S): NUTTALL, P A; PAESEN, G C; NUTTALL PATRICIA, A
 PATENT ASSIGNEE(S): (NAEN-N) NAT ENVIRONMENTAL RES COUNCIL; (NATU-N)
 NATURAL ENVIRONMENTAL RES COUNCIL
 COUNTRY COUNT: 84
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9924567	A1	19990520	(199927)*	EN	65
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI					
GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS					
LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK					
SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9910471	A	19990531	(199941)		
EP 1029044	A1	20000823	(200041)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
BR 9814958	A	20001003	(200053)		
CN 1284995	A	20010221	(200131)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9924567	A1	WO 1998-GB3397	19981112
AU 9910471	A	AU 1999-10471	19981112
EP 1029044	A1	EP 1998-952929	19981112
		WO 1998-GB3397	19981112
BR 9814958	A	BR 1998-14958	19981112
		WO 1998-GB3397	19981112
CN 1284995	A	CN 1998-812939	19981112

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9910471	A Based on	WO 9924567
EP 1029044	A1 Based on	WO 9924567

09/554547

BR 9814958 A Based on WO 9924567

PRIORITY APPLN. INFO: GB 1997-23945 19971112

AN 1999-327399 [27] WPIDS

AB WO 9924567 A UPAB: 19990714

NOVELTY - Tissue cement proteins

(TCPs) produced by blood-feeding **ectoparasites** are new.

DETAILED DESCRIPTION - A TCP having a full-length amino acid sequence of 148 or 154 residues or containing any of the partial amino acid sequences (81, 90, 204, 114 or 65 residues), related TCPs from blood-feeding **parasites**, preferably **ticks** and functional equivalents are new (sequences are given in the specification).

INDEPENDENT CLAIMS are also included for:

(1) a nucleic acid molecule (I), which encodes a TCP as above or which hybridizes with the nucleic acid under standard hybridization conditions;

(2) a cloning or expression vector comprising (I); a host cell transformed or transfected with the vector of (2);

(3) a transgenic animal that has been transformed by (I) or a vector as above; and

(4) preparation of a TCP by expressing a vector as above in a host cell and culturing the host cell under conditions where the protein is expressed and recovering the expressed protein.

ACTIVITY - Antiparasitic; Adhesive.

MECHANISM OF ACTION - Vaccine.

USE - The TCP, in a pharmaceutical composition, is useful for therapy, as a vaccine or vaccine component. The TCP itself is used to immunize an animal for production of such a vaccine. The TCPs are useful for bonding animal tissues. This may be temporary or permanent bonding and used in, e.g. repair of incised surgical wounds, lacerations, skin grafting, etc. The TCP can also be used as a protective immunogen in the control of diseases caused by infections transmitted by arthropod **parasites**. All claimed.

ADVANTAGE - The **tick** TCPs provide a non-immunogenic tissue cement capable of bonding mammalian tissue with great strength. The hardening or elastic properties of the TCPs can be tailored for particular requirements. Presently available tissue cements are of two types. Acrylic-based glues are extremely strong, yet are also very toxic and can only be used in very small quantities in the body. The second type of tissue cement is non-immunogenic but forms a much less strong bond. It is useful in only a small number of surgical procedures.

L8 ANSWER 5 OF 9

MEDLINE

DUPLICATE 2

ACCESSION NUMBER: 2000099744 MEDLINE

DOCUMENT NUMBER: 20099744 PubMed ID: 10633927

TITLE: The origin and function of cement gland secretion in *Pomphorhynchus laevis* (Acanthocephala).

AUTHOR: Dezfuli B S; Capuano S; Pironi F; Mischiati C

CORPORATE SOURCE: Department of Biology, University of Ferrara, Italy..
dzb@dns.unife.it

SOURCE: PARASITOLOGY, (1999 Dec) 119 (Pt 6) 649-53.
Journal code: OR0; 0401121. ISSN: 0031-1820.

PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

09/554547

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200002
ENTRY DATE: Entered STN: 20000314
Last Updated on STN: 20000314
Entered Medline: 20000229

AB **Cement gland protein** in male and inseminated female individuals of an acanthocephalan **parasite** of fish, *Pomphorhynchus laevis* (Muller, 1776), was localized by immunohistochemistry using an antibody specific for **cement protein**. Male *P. laevis* possess 3 pairs of round to oval cement glands ranging from 0.5 to 0.9 mm in length and from 0.3 to 0.7 mm in width. Each gland has an outer portion containing nuclear fragments and other cellular organelles surrounding a space for storage of gland products. Very little work has been carried out on the nature of the cement gland secretions. We have previously reported that the major component of **cement** is a **protein** with molecular weight of 23 kDa; in fresh glands it is white in colour. Immunohistochemical studies herein reported were carried out using a polyclonal antibody raised against purified *P. laevis* p23 **cement protein** (anti-p23PL). Localization of p23 **cement protein** at the light microscope level, by means of the anti-p23PL antibody, shows that p23 is present within the cytoplasmic layer of the gland as well as in the gland duct lumen. Interestingly, the p23 **cement protein** was also identifiable at the posterior ends of females retaining the cap. Positivity to anti-p23PL antibody was obtained not only in the external part of the copulatory cap, but also within the vaginal tract and at the base of the uterine duct. Thus, we report herein the first photographic evidence that the copulatory cap is not a simple gonopore lid but it is really an intravaginal plug.

L8 ANSWER 6 OF 9 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 92356330 MEDLINE
DOCUMENT NUMBER: 92356330 PubMed ID: 1495047
TITLE: **Tick** (Acari: Ixodidae) attachment cement and salivary gland cells contain similar immunoreactive polypeptides.
AUTHOR: Jaworski D C; Rosell R; Coons L B; Needham G R
CORPORATE SOURCE: Department of Entomology, Ohio State University, Columbus 43210-1292.
SOURCE: JOURNAL OF MEDICAL ENTOMOLOGY, (1992 Mar) 29 (2) 305-9.
Journal code: J1B; 0375400. ISSN: 0022-2585.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199209
ENTRY DATE: Entered STN: 19920925
Last Updated on STN: 19920925
Entered Medline: 19920908

AB A specific antiserum (12C) raised to a 90-kDa immunogenic component of salivary glands of the **tick** *Rhipicephalus appendiculatus* recognized similar 90-kDa polypeptides from salivary glands of the American dog **tick**, *Dermacentor variabilis*, and the lone star **tick**, *Amblyomma americanum*, as well as 70-kDa **polypeptides** in the **cement** of

09/554547

D. variabilis, *A. americanum*, and *R. sanguineus* (brown dog tick). The reduction in size of the polypeptide for these ticks suggests that it is modified in some way during or after secretion. Immunostaining of salivary glands of unfed- and partially-fed female *D. variabilis* localized an immunoreactive protein in the d- and e-cells of the type III acini. The quantity of label in granules of glands from unfed ticks was visibly greater than in the granules of glands from partially fed ticks, suggesting that this component is secreted within the first 2 d of feeding. Collectively, these data support the conclusion that a 90-kDa polypeptide of saliva is conserved among ixodid tick genera and is a component of the attachment cement.

L8 ANSWER 7 OF 9 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 92136687 MEDLINE
DOCUMENT NUMBER: 92136687 PubMed ID: 1735209
TITLE: A histopathologic study of late aseptic loosening of cemented total hip prostheses.
AUTHOR: Williams R P; McQueen D A
CORPORATE SOURCE: University of Kansas School of Medicine-Wichita.
SOURCE: CLINICAL ORTHOPAEDICS AND RELATED RESEARCH, (1992 Feb) (275) 174-9.
PUB. COUNTRY: United States
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199203
ENTRY DATE: Entered STN: 19920329
Last Updated on STN: 19990129
Entered Medline: 19920312

AB Eighteen patients being treated for revision total hip arthroplasty for aseptic loosening an average of 9.5 years after primary cemented hip arthroplasty were studied. The patients were found to have been symptomatic an average of one year before revision. Review of the roentgenograms at the time of revision revealed that most patients had moderate to severe loosening of the prostheses by Charnley's criteria. These findings were confirmed at surgery. Study of the tissue surrounding the prostheses suggests that the prominent particles were methylmethacrylate "pearls" caused by cement fragmentation. These particles were surrounded by histiocytes that were actively synthesizing and releasing protein. Cement fragmentation and not polyethylene wear may be the major cause of late aseptic loosening of cemented hip prostheses.

L8 ANSWER 8 OF 9 BIOSIS COPYRIGHT 2002 BIOSIS
ACCESSION NUMBER: 1992:443073 BIOSIS
DOCUMENT NUMBER: BR43:76073
TITLE: EVIDENCE THAT A 90 KDA TICK SALIVARY GLAND POLYPEPTIDE IS A CEMENT COMPONENT.
AUTHOR(S): JAWORSKI D C; ROSELL R; COONS L B; NEEDHAM G R
CORPORATE SOURCE: ACAROL. LAB., DEP. ENTOMOL., OHIO STATE UNIV., 484 W. 12TH AVE., COLUMBUS, OHIO 43210, USA.
SOURCE: DUSBABEK, F. AND V. BUKVA (ED.). MODERN ACAROLOGY, VOL. 1; VIII INTERNATIONAL CONGRESS OF ACAROLOGY, CESKE BUDEJOVICE, CZECHOSLOVAKIA, AUGUST 6-11, 1990. VII+651P. SPB ACADEMIC PUBLISHING BV: THE HAGUE,

09/554547

NETHERLANDS. ILLUS. MAPS, (1991) 0 (0), 335-340.
ISBN: 90-5103-054-1.

DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L8 ANSWER 9 OF 9 BIOSIS COPYRIGHT 2002 BIOSIS
ACCESSION NUMBER: 1970:34011 BIOSIS
DOCUMENT NUMBER: BR06:34011
TITLE: THE ATTACHMENT OF SOME IXODID TICKS TO
THEIR NATURAL HOSTS.
AUTHOR(S): MOORHOUSE D E
SOURCE: EWAN, JOSEPH (EDITED BY). A SHORT HISTORY OF BOTANY
IN THE UNITED STATES IX + 174P. HAFNER PUBLISHING
CO.: NEW YORK, N.Y., U.S.A. AND LONDON, ENGLAND,
(1969) 319-327.
FILE SEGMENT: BR; OLD
LANGUAGE: Unavailable

(FILE 'CAPLUS', MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,
JICST-EPLUS, JAPIO' ENTERED AT 11:10:18 ON 17 JAN 2002)

L9 106 S PAESEN G?/AU
L10 779 S (ANNENUTTALL P? OR NUTTALL P?)/AU
L11 51 S L9 AND L10
L12 834 S L9 OR L10
L13 3 S (L11 OR L12) AND L1
L14 2 DUP REM L13 (1 DUPLICATE REMOVED)

Author (s)

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:798068 CAPLUS
DOCUMENT NUMBER: 135:356741
TITLE: Vaccine comprising a tick cement
protein
INVENTOR(S): Trimmell, Adama Roseanne; Paesen, Guido
Christiaan; Nuttall, Patricia Anne
PATENT ASSIGNEE(S): Evolutech Limited, UK
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001080881	A1	20011101	WO 2001-GB1834	20010425
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: GB 2000-10068 A 20000425

Searcher : Shears 308-4994

09/554547

GB 2000-28606 A 20001123

AB The invention relates to the use of tick **cement proteins** in the prodn. of vaccines for protecting animals against the bite of blood-sucking ectoparasites and against the transmission of viruses, bacteria and other pathogens by such ectoparasites. When used as vaccine components, the tick **cement proteins** of the invention confer broad cross-reactivity against a variety of species of ectoparasite.

REFERENCE COUNT: 6

REFERENCE(S): (1) Brown, S; EXP PARASITOL 1986, V62, P40
CAPLUS
(3) Mulenga, A; INF IMMUN 1999, V67(4), P1652
CAPLUS
(4) National Environmental Research Council; WO
9924567 A 1999 CAPLUS
(5) Shapiro, S; EXP APPL ACAROL 1989, V7, P33
CAPLUS
(6) Yale University; WO 0140469 A 2001 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1

ACCESSION NUMBER: 1999:326042 CAPLUS

DOCUMENT NUMBER: 130:348205

TITLE: Tick tissue **cement proteins**
and cDNAs and their uses as vaccines and in
bonding tissues

INVENTOR(S): **Paesen, Guido Christian; Nuttall,
Patricia Ann**

PATENT ASSIGNEE(S): National Environmental Research Council, UK

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9924567	A1	19990520	WO 1998-GB3397	19981112
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9910471	A1	19990531	AU 1999-10471	19981112
EP 1029044	A1	20000823	EP 1998-952929	19981112
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
BR 9814958	A	20001003	BR 1998-14958	19981112
PRIORITY APPLN. INFO.:			GB 1997-23945	A 19971112
			WO 1998-GB3397	W 19981112

AB The present invention relates to tissue **cement proteins** produced by certain species of blood-feeding ectoparasites, such as the tick *Rhipicephalus appendiculatus*. These

09/554547

proteins and compns. comprising these proteins are particularly useful for the temporary or permanent bonding of animal tissues to each other or to other biomaterials. The present invention also relates to the use of tissue **cement proteins** in the prodn. of vaccines that protect animals against the bite of blood-sucking ectoparasites and the transmission of viruses, bacteria and other pathogens by such ectoparasites. Thus, antisera against buffer-extd. and hot alkali and acid-extd. **cement cone proteins** were prepd. and used in screening cDNA libraries from *R. appendiculatus* salivary gland. Several "**cement proteins**" were identified. One was expressed in a baculovirus-insect cell system. This 144-amino acid protein is proposed to act as a glue which binds the cement cone to the surrounding epidermal and dermal tissues of the host.

REFERENCE COUNT:

9

REFERENCE(S):

- (1) Brown, S; Experimental Parasitology 1986, V62(1), P40 CAPLUS
- (2) Crampton, A; Exp Appl Acarol 1998, V22(3), P177 CAPLUS
- (3) Int Centre of Insect Physiolog; GB 2142334 A 1985 CAPLUS
- (6) Needham, G; Experimental & Applied Acarology 1989, V7, P21 CAPLUS
- (7) Shapiro, S; Experimental & Applied Acarology 1989, V7, P33 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> fil hom

FILE 'HOME' ENTERED AT 11:12:28 ON 17 JAN 2002